METHOD AND APPARATUS FOR SCHEDULING MESSAGE PROCESSING

ABSTRACT

The present invention provides a method and apparatus for scheduling message processing. The present invention provides a scheduling mechanism, or scheduler (602), that

5   receives messages (608) and stores the messages (610 or 614) in a first queue (604) or a second queue (606) based, in part, on various criteria associated with the messages. The criteria include message attributes, such as message priority, virtual private network ("VPN") classification and destination software function. The first queue (604) can be a first-in-first-out queue, and the second queue (606) can be a multi-dimensional queue. The scheduler

10   (602) then schedules the queued messages (612 or 616) for processing based, in part, on various operating criteria (618), such as historical operating data, current operating data and anti-starvation criteria. In addition, the scheduler (602) can be programmed to function in a variety of operating modes.

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